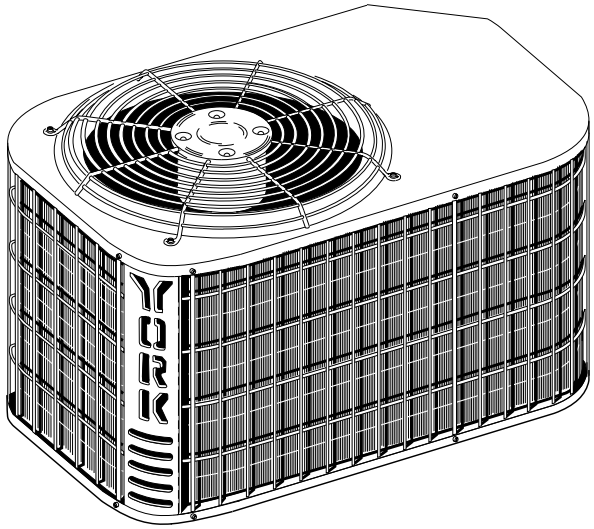
YORK®

TECHNICAL SPECIFICATIONS

SPLIT-SYSTEM CONDENSING UNITS

"HRC" Series

Models H*RC018 thru H*RC060
Nominal Capacity: 18 thru 60 MBH
Nominal Efficiency: 12:00 SEER



DESCRIPTION

The HRC Series condensing unit is the outdoor part of a versatile system of air conditioning. It is designed to be custom-matched with one of our complete line of evaporator sections, each designed to serve a specific function. Matching Air Handlers are available for upflow, downflow or horizontal application to provide a complete system. Electric heaters are available if required. Add-On coils are available for use with upflow, downflow or horizontal furnaces.

FEATURES

QUALITY CONDENSER COILS - The coil is constructed of copper tubes and hardened black coated aluminum fins for durability and long lasting efficient operation. The decorative 2" x 4" grille backed by the black coated fins, enhances appearance and protects the unit.

PROTECTED COMPRESSOR - The compressor is internally protected against high pressure and temperature. This is accomplished by the simultaneous operation of a high pressure relief valve and a temperature sensor which protects the compressor if undesirable operating conditions occur. A liquid line filter-drier further protects the compressor.

DURABLE FINISH - Cabinet is made of pre-painted steel. The pre-treated flat galvanized steel provides a better paint to steel bond, which resists corrosion and rust creep. Special primer formulas and glossy earth tone finish insure less fading when exposed to sunlight.

LOWER INSTALLED COST - Installation time and costs are reduced by easy power and control wiring connections. Discharge line heat exchanger knockouts are provided, if required. These models are available in sweat connect models only. The unit contains enough refrigerant for matching indoor coils and 15 feet of interconnecting piping. The small base dimension means less space is required on the ground or roof. Start-assist components included as standard where TXV is required.

TOP DISCHARGE - The warm air from the top mounted fan is blown up away from the structure and any landscaping. This allows compact location on multi-unit applications.

LOW OPERATING SOUND LEVEL - The upward air flow carries the normal operating noise up away from the living area. The rigid top panel effectively isolates any motor sound. Isolator mounted compressor and the rippled fins of the condenser coil muffle the normal fan motor and compressor operating sounds.

LOW MAINTENANCE - Long life permanently lubricated motor-bearings need no annual servicing.

EASY SERVICE ACCESS - Fully exposed refrigerant connections and a single panel covering the electrical controls and the molex plug in the control box connecting the condenser fan, make for easy servicing of the unit.

SECURED SERVICE VALVES - Secured re-usable service valves are provided on both the liquid and vapor sweat connections for ease of evacuating and charging.

COOLING CAPACITY - With Air Handler Coils

UNIT MODEL[1]	AIR HANDLER			COIL[2] MODEL	COOLING						
	MODEL	ELECTRIC HEAT KW	W		RATED CFM	NET MBH TOTAL	NET MBH SENS.	KW	SEER	SEER/ TXV[5]	EER
HRC / N1AH / G2FD											
H1RC018	N1AHB08	2,5,8,10	17	G2FD024S17	800	19.2	13.8	1.68	--	12.10	11.40
H1RC024	N1AHB08	2,5,8,10	17	G2FD024S17	800	23.6	17.0	2.21	--	12.00	10.70
	N1AHB08	5,8,10,15,18	17	G2FD030S17	850	24.0	17.3	2.22	--	12.10	10.80
H1RC030	N1AHB12	5,8,10,15,18	17	G2FD030S17	1025	29.6	21.3	2.80	--	12.00	10.60
	N1AHB12	5,8,10,15,18	17	G2FD036S17	1025	30.0	21.6	2.79	--	12.10	10.75
H1RC036	N1AHB12	5,8,10,15,18	17	G2FD036S17	1200	33.6	24.2	3.20	--	12.00	10.65
	N1AHB12	5,8,10,15,18	17	G2FD046S17	1250	34.8	25.1	3.20	--	12.00	10.95
H2RC042	N1AHC16	5,8,10,15,20	21	G2FD042S21	1400	41.0	29.3	3.78	12.00	--	10.50
	N1AHC16	5,8,10,15,20	21	G2FD048S21	1400	42.5	30.6	3.78	12.00	--	10.75
H1RC048	N1AHC16	5,8,10,15,20	21	G2FD048S21	1600	45.5	32.8	4.06	--	12.20	11.20
	N1AHD20	8,10,15,20,25,30	24	G2FD060S24	1650	47.0	33.8	4.10	--	12.50	11.45
	N1AHD20	8,10,15,20,25,30	24	G2FD061H24	1675	47.5	35.2	4.13	--	12.50	11.50
H1RC060	N1AHD20	8,10,15,20,25,30	24	G2FD060S24	1850	57.5	41.4	5.53	--	12.00	10.40
	N1AHD20	8,10,15,20,25,30	24	G2FD061H24	1850	58.0	43.2	5.55	--	12.00	10.45
HRC / N1VS - VARIABLE SPEED											
H1RC018	N1VSB12	5,8,10,15,18	17	G2FD024S17	800	20.0	14.4	1.54	--	13.50	12.95
H1RC024	N1VSB12	5,8,10,15,18	17	G2FD024S17	800	24.4	17.6	2.03	--	13.00	12.00
	N1VSB12	5,8,10,15,18	17	G2FD036S17	850	24.8	17.9	2.02	--	13.50	12.25
H1RC030	N1VSB12	5,8,10,15,18	17	G2FD036S17	1025	30.6	22.0	2.60	--	13.00	11.75
	N1VSB12	5,8,10,15,18	17	G2FD046S17	1050	31.4	22.6	2.62	--	13.55	12.00
H1RC036	N1VSB12	5,8,10,15,18	17	G2FD036S17	1200	33.8	24.3	3.10	--	12.15	10.85
	N1VSB12	5,8,10,15,18	17	G2FD046S17	1250	35.0	25.2	3.10	--	12.35	11.20
	N1VSC16	5,8,10,15,20	21	G2FD048S21	1250	36.0	25.9	2.98	--	13.40	12.10
H2RC042	N1VSC16	5,8,10,15,20	21	G2FD048S21	1400	42.5	30.4	3.63	13.00	--	11.45
H1RC048	N1VSC16	5,8,10,15,20	21	G2FD048S21	1600	46.5	33.5	3.81	--	13.00	12.20
	N1VSD20	8,10,15,20,25,30	24	G2FD060S24	1650	48.0	34.6	3.75	--	13.50	12.80
	N1VSD20	8,10,15,20,25,30	24	G2FD061H24	1875	48.5	36.2	3.79	--	14.00	12.80
H1RC060	N1VSD20	8,10,15,20,25,30	24	G2FD060S24	1825	59.0	42.5	5.13	--	13.00	11.50
	N1VSD20	8,10,15,20,25,30	24	G2FD061H24	1875	59.0	44.6	5.13	--	13.50	11.50
HRC / F2R P/ RC / FP / FC[3,4]											
H1RC018	F2RP/FP024	5,8,10	18	—	650	19.0	14.1	1.71	--	12.00	11.10
H1RC024	F2RP/FP024	5,8,10	18	—	800	23.6	17.5	2.22	--	12.00	10.65
H1RC030	F2RP/FP030	5,8,10,15	18	—	1035	23.0	17.0	2.16	--	12.00	10.65
	F2RP/FP036	5,8,10,15	18	—	1035	29.0	21.5	2.82	--	12.00	10.30
H1RC036	F2FP048	10,15,20,25	24	—	1250	35.0	25.9	3.26	--	12.00	10.75
	F2RP/FP036	5,8,10,15	21	—	1250	34.4	25.5	3.14	--	12.00	10.95
	F2RP/FP042	5,8,10,15	21	—	1250	33.0	24.4	3.20	--	11.30	10.30
H2RC042	F2RP/FP042	5,8,10,15	21	—	1400	40.5	28.9	3.79	11.80	--	10.35
	F2FP048	10,15,20,25	24	—	1400	42.5	30.5	3.84	12.00	--	10.55
H1RC048	F2FP048	10,15,20,25	24	—	1600	46.5	34.4	4.35	11.40	12.00	10.70
	F2FP060	10,15,20,25	24	—	1600	47.5	35.2	4.42	11.50	12.00	10.75
	F2FV060	10,15,20,25	24	—	1650	48.0	35.9	3.76	--	13.50	12.75
H1RC060	F2FP060	10,15,20,25	24	—	1850	56.5	41.8	5.59	11.15	11.60	10.10
	F2FV060	10,15,20,25	24	—	1850	58.5	44.5	5.13	--	13.00	11.40

Certified in accordance with the Unitary Small Equipment certification program which is based on ARI Standard 210/240.

Cooling MBH based on 80°F entering air temperature, 50% RH, and rated air flow.

KW includes compressor, outdoor fan and indoor blower motor watts. Add-on coils include 365 watts/1000 CFM for blower motor.

EER (Energy Efficiency Ratio) is the total cooling output in BTU's at a 95°F outdoor ambient divided by the total electric power in watt-hours at those conditions.

SEER (Seasonal Energy Efficiency Ratio) is the total cooling output in BTU's during a normal annual usage period for cooling divided by the total electric power input in watt-hours during the same period.

[1] All models are single phase, unless noted otherwise.

[2] Refer to coil installation guide for proper coil application.

[3] P3HU and P3UR furnaces and FRP Air Handlers have B.O.D. standard. (All Ratings include B.O.D.)

[4] To meet R=4.2 insulation requirements, substitute F2FP for F2RP and F2FC for F2RC models. All ratings remain the same.

[5] Thermal Expansion Valve kit required on specific indoor coils to obtain system performance. (Start assist components included, except 060 model which does not require due to scroll compressor.)

— = Field transition may be required.

COOLING CAPACITY - With Upflow, Downflow & Horizontal Furnace and Coils

UNIT MODEL	FURNACE**		COIL[5] MODEL	COOLING						
	CFM RANGE (Min. —Max.)	W		RATED CFM	NET MBH TOTAL	NET MBH SENS.	KW	SEER	SEER/ TXV[1]	EER
H1RC018	1000	14,17	G1UA024S14,17	650	19.0	14.1	1.7	--	12.00	11.30
		14,17	G2FD024S14,17	650	19.2	14.2	1.7	--	12.10	11.40
		--	G1HD024	650	19.0	14.1	1.7	--	12.00	11.50
		17	G2FD030S17	650	19.4	14.4	1.7	--	12.20	11.55
		14	G2FD035S17	650	19.4	14.4	1.7	--	12.20	11.55
H1RC024	800 1000 1200	--	G1HD024	800	24.0	17.8	2.2	--	12.00	10.80
		17	G1NA030S17K	800	24.0	17.8	2.2	--	12.00	10.80
		14,17	G1UA024S14,17	800	23.0	17.0	2.2	--	11.80	10.60
		17	G1UA036S17	800	24.0	17.8	2.2	--	12.10	10.80
		14,17	G2FD024S14,17	800	23.6	17.5	2.2	--	12.00	10.70
		17	G2FD030S17	800	24.0	17.8	2.2	--	12.10	10.80
		14	G2FD035S14	800	24.0	17.8	2.2	--	12.10	10.80
		--	G1NF036SOF	800	23.2	17.2	2.1	--	12.00*	10.80
		14	G1UA030S14	850	23.6	17.5	2.2	--	12.00	10.70
		17	G2FD036S17	850	24.4	18.1	2.2	--	12.15	10.90
		--	G1HD036	850	24.0	17.8	2.2	--	12.10	10.95
H1RC030	1000 1200 1400	14	G1UA030S14	1000	29.2	21.6	2.8	--	11.85	10.50
		17,21	G1UA036S17,21	1025	29.6	21.9	2.8	--	12.00	10.60
		14,17	G2FD030S17	1000	29.6	21.9	2.8	--	12.00	10.60
		14	G2FD035S14	1000	29.6	21.9	2.8	--	12.00	10.60
		17	G1NA030S17K	1000	29.4	21.8	2.8	--	12.00	10.50
		--	G1NF036SOF	1025	29.0	21.5	2.8	--	12.00*	10.50
		21	G1UA048S21	1025	30.2	22.3	2.8	--	12.20	10.90
		--	G1HD036	1025	30.0	22.2	2.8	--	12.00	10.75
		21	G2FD036S21	1025	30.0	22.2	2.8	--	12.10	10.85
		17	G2FD036S17	1025	30.0	21.6	2.8	--	12.10	10.75
H1RC036	1200 1400 1600	17,21	G1UA036S17,21	1200	33.0	24.4	3.1	--	11.50	10.55
		14	G2FD035S14	1200	32.8	24.3	3.1	--	11.60	10.60
		21	G1NA048S21D	1225	35.0	25.9	3.2	--	12.00	10.90
		--	G1NF036SOF	1200	34.0	25.2	3.3	--	12.00*	10.40
		21,24	G1UA048S21,24	1250	35.0	25.9	3.3	--	12.00	10.70
		--	G1HD036	1225	33.4	24.7	3.1	--	11.80	10.70
		21	G2FD042S21	1225	34.4	25.5	3.2	--	12.00	10.90
		21,24	G2FD048S21,24	1250	35.4	26.2	3.2	--	12.10	11.15
		17	G2FD046S17	1225	34.8	25.8	3.2	--	12.00	10.95
		21	G2FD036S21	1225	34.2	25.3	3.1	--	12.00	10.90
		17	G2FD036S17	1225	33.6	24.9	3.2	--	12.00	10.65
H2RC042	1400 1600	21	G1NA048S21D	1400	41.0	28.6	3.8	12.00	--	10.40
		--	G1NF048SOF	1400	41.0	28.6	3.8	12.00	--	10.40
		21	G2FD042S21	1400	41.0	29.3	3.8	12.00	--	10.50
		21,24	G1UA048S21,24	1425	41.5	29.7	3.8	12.00	--	10.65
		21,24	G1UA060S21,24	1450	43.0	30.7	3.9	12.50	--	10.95
		--	G1HD048	1400	41.5	29.7	3.8	12.00	--	10.60
		17	G2FD046S17	1400	42.0	30.2	3.8	12.00	--	10.60
		21,24	G2FD048S21,24	1425	42.5	30.6	3.8	12.00	--	10.75
H1RC048	1600 2000	21	G1NA048S21D	1600	46.0	34.0	4.1	--	12.00	11.20
		--	G1HD048	1600	45.0	33.3	4.0	--	12.00	11.15
		--	G1NF048SOF	1600	46.0	34.0	4.1	--	12.00*	11.20
		17	G2FD046S17	1600	44.5	32.9	4.2	--	12.00	10.50
		21,24	G2FD048S21,24	1600	45.5	33.7	4.1	--	12.20	11.20
		21.24	G1UA048S21,24	1600	45.5	33.7	4.1	--	12.00	11.00
		21,24	G1UA060S21,24	1620	47.0	34.8	4.1	--	12.50	11.45
		24	G2FD060S24	1620	47.0	34.8	4.1	--	12.50	11.45
		--	G1HD060	1620	46.5	36.1	4.1	--	12.40	11.40
		24	G2FD061H24	1625	47.5	35.2	4.1	--	12.50	11.50
H1RC060	2000	21,24	G1UA060S21,24	1850	57.5	42.6	5.5	--	12.00	10.40
		--	G1NF060SOF	1850	57.5	42.6	5.5	--	12.00*	10.50
		--	G1HD060	1850	57.5	42.6	5.6	--	12.00	10.25
		24	G2FD060S24	1850	57.5	42.6	5.5	--	12.00	10.40
		24	G2FD061H24	1850	58.0	43.2	5.5	--	12.00	10.45

See Notes on Page 2.

* Requires 2FD fan time delay.

** Refer to Quick Selection Chart for specific furnace matchup.

NOTE: G1NF coils apply to the G8C outdoor furnace only.

COOLING PERFORMANCE

MODEL	SUCT. T/P @ COMPR.		AIR TEMP ON CONDENSER						MODEL	SUCT. T/P @ COMPR.		AIR TEMP ON CONDENSER					
			75°F		95°F		115°F					75°F		95°F		115°F	
	TEMP.	PSIG	MBH	KW	MBH	KW	MBH	KW		TEMP.	PSIG	MBH	KW	MBH	KW	MBH	KW
H1RC018	35	61.5	16.84	1.43	13.61	1.58	11.39	1.69	H2RC042	35	61.5	35.94	3.12	31.92	3.76	27.86	4.54
	40	68.5	18.39	1.44	15.48	1.62	13.25	1.76		40	68.5	39.29	3.15	35.11	3.77	30.80	4.55
	45	76.0	20.06	1.46	17.34	1.65	14.73	1.82		45	76.0	42.48	3.21	38.17	3.84	33.70	4.63
	50	84.0	21.54	1.47	19.20	1.69	16.47	1.88		50	84.0	45.62	3.23	41.40	3.92	36.56	4.39
H1RC024	35	61.5	20.81	1.86	16.82	2.06	14.07	2.20	H1RC048	35	61.5	39.75	3.32	35.31	3.99	30.82	4.81
	40	68.5	22.73	1.88	19.13	2.11	16.37	2.29		40	68.5	43.46	3.34	38.84	4.00	34.08	4.83
	45	76.0	24.80	1.90	21.43	2.15	18.20	2.37		45	76.0	46.99	3.40	42.23	4.07	37.28	4.91
	50	84.0	26.63	1.91	23.73	2.20	20.36	2.44		50	84.0	50.47	3.43	45.80	4.16	40.44	4.66
H1RC030	35	61.5	26.13	2.39	21.13	2.65	17.67	2.83	H1RC060	35	61.5	50.26	4.42	44.64	5.32	38.97	6.42
	40	68.5	28.55	2.41	24.02	2.71	20.56	2.98		40	68.5	54.95	4.46	49.10	5.33	43.08	6.44
	45	76.0	31.14	2.44	26.71	2.77	22.86	3.02		45	76.0	59.41	4.54	53.38	5.43	47.13	6.55
	50	84.0	33.44	2.45	29.80	2.83	25.57	3.14		50	84.0	63.81	4.58	57.90	5.55	51.13	6.22
H1RC036	35	61.5	29.20	2.70	23.61	2.99	19.75	3.19									
	40	68.5	31.90	2.72	26.84	3.06	22.98	3.32									
	45	76.0	34.80	2.75	30.07	3.12	25.54	3.43									
	50	84.0	37.36	2.77	33.30	3.19	28.57	3.54									

NOTES: 1. For condensing unit only. Does not include effect of evaporator motor power or heat.
2. Performance based on 15° superheat and 15° sub-cooling at condensing unit.
a. Increase capacity 1% for each 2° increase in sub-cooling.
b. Decrease capacity 1% for each 2° decrease in sub-cooling.
3. Sub-cooling in excess of 20° may result in excessively high condensing temperature with air on condenser above 115°.
Maximum recommended condensing temperature is 140°F.

SOUND RATINGS

UNIT MODEL HRC	SOUND RATINGS BELS	UNIT MODEL HRC	SOUND RATINGS BELS
018	8.0	042	8.2
024	8.0	048	8.4
030	8.0	060	8.4
036	8.2		

CERTIFICATION APPLIES ONLY WHEN THE COMPLETE SYSTEM IS LISTED WITH ARI

ACCESSORIES

Refer to Price Manual for specific model numbers.

Compressor Blanket - Designed to further reduce the normal operating sound.

Blower Time Delay - Available to increase efficiency when installed. Installs on indoor section and maintains blower for approximately one minute after cooling thermostat has been satisfied.

Hard Start Kit (Single Phase Units) - provides required starting torque for units with thermal expansion valve.

TXV Kit - 1TV0700 series must be used to obtain system performance. See Tabular Data Insert for proper selection.

Outdoor Thermostat - 2TD06700124 - Consists of an adjustable outdoor thermostat and relay in a vented enclosure. It provides additional second stage control of the supplemental resistance heat. (balance point control)

Room Thermostats - One of the following thermostats may be used with these systems.

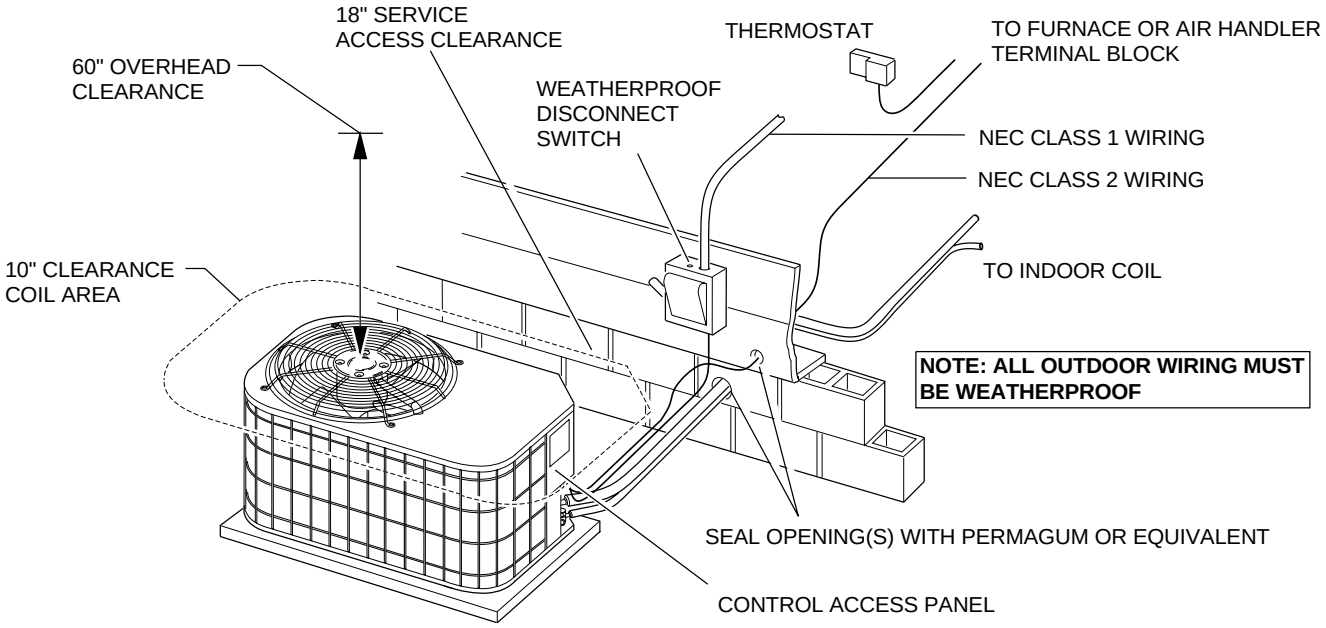
2TH07701024 - One Stage Heat / One Stage Cool, manual changeover, non-programmable.

2ET07700324 - Programmable electronic 1H/1C Manual change over.

2TH13700424 - One Stage Heat (Round Thermostat). For cooling applications, one of the following subbases must be used:

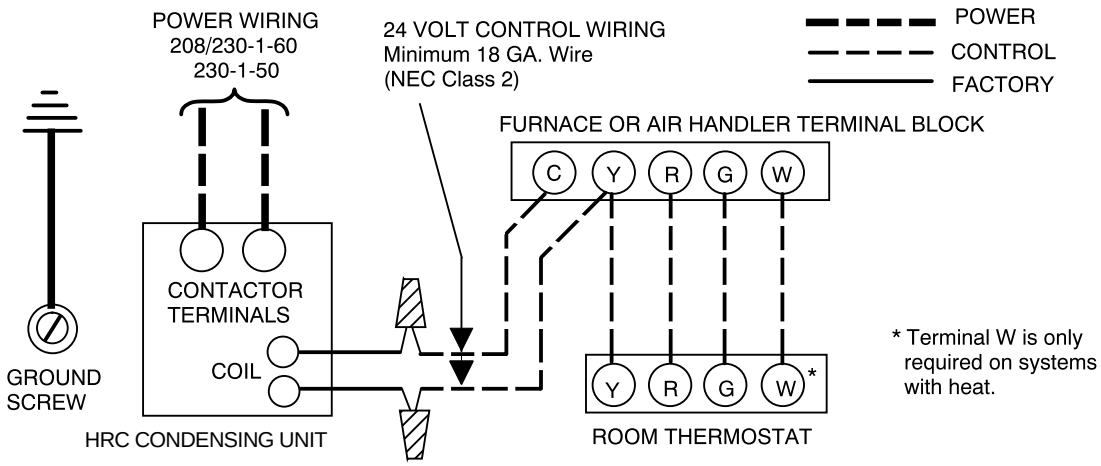
2TB08700124 - One Stage Cool.
2TB17700424 - One Stage Heat / One Stage Cool - Auto fan on cooling only.
2TB17700324 - One Stage Heat / One Stage Cool - Auto fan on cooling and heating.

TYPICAL INSTALLATION - HRC018 THRU 060



TYPICAL FIELD WIRING

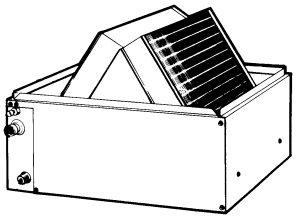
ALL FIELD WIRING TO BE IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE (NEC) AND/OR LOCAL CODES



ALL OUTDOOR WIRING MUST BE WEATHERPROOF. USE COPPER CONDUCTORS ONLY.

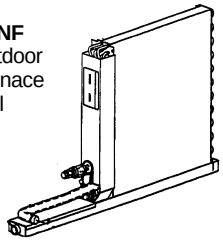
MATCHING INDOOR COMPONENTS

Add-On Coils - For Furnace Application

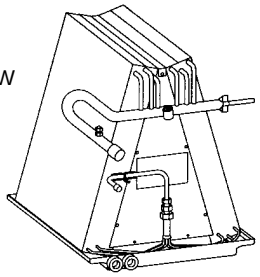


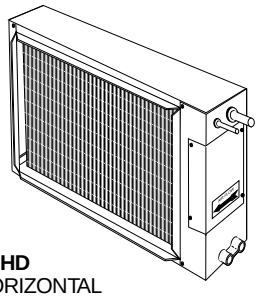
G1UA
UPFLOW

G1NF
Outdoor
Furnace
Coil



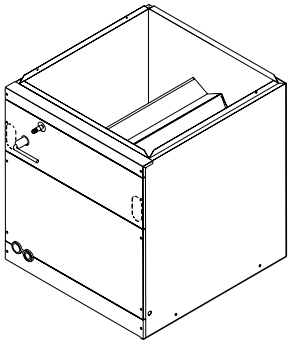
G1NA
UPFLOW





G1HD
HORIZONTAL

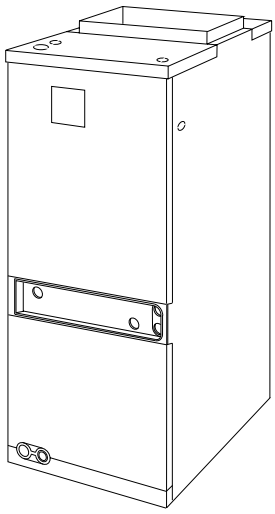
G2FD*
MULTI-POSITION
(Upflow, Horizontal,
and Downflow)



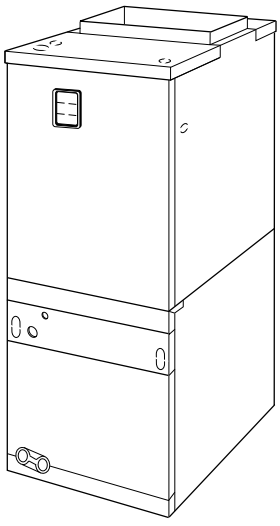
* Available with factory installed horizontal drain pan .

Air Handlers - For Non-Furnace Application

F2RC / F2FC
F2RP / F2FP / F2FV
FAN COIL UNITS



UPFLOW
HORIZONTAL



N1VS, N1AH
BLOWER

G2FD*
COIL

UPFLOW
DOWNFLOW
HORIZONTAL

* G2FD coils are available with factory installed horizontal drain pan.

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